

**AMENDMENTS TO THE CLAIMS**

Please cancel claim 1, and insert new claims 67-89, as follows:

1-66. (Canceled)

67. (New) A probe for deploying electrode arrays, comprising:

a shaft having a distal end and a proximal end;

a first array of electrodes mounted on the shaft, the first array of electrodes having a retracted configuration and a deployed configuration; and

a second array of electrodes mounted on the shaft at a location spaced apart proximally from the first array of electrodes, the second array of electrodes having a retracted configuration and a deployed configuration;

wherein at least one of the electrodes of the first array has an end that faces at least partially in a proximal direction, at least one of the electrodes of the second array has an end that faces at least partially in a distal direction, and the end of the at least one of the electrodes of the second array is located proximal to the end of the at least one of the electrodes of the first array when the first and the second arrays are deployed.

68. (New) The probe of claim 67, wherein each of the electrodes of the first and the second arrays everts away from the shaft as it is being deployed.

69. (New) The probe of claim 67, wherein the shaft has at least one cavity for receiving the first and the second arrays of electrodes when the first and the second arrays of electrodes are retracted.

70. (New) The probe of claim 67, wherein the shaft has at least one cavity for receiving the

first array of electrodes when the first array of electrodes is retracted, and at least a second cavity for receiving the second array of electrodes when the second array of electrodes is retracted.

71. (New) The probe of claim 67, further comprising:

a first rod connected to the first electrode array and slidably disposed in the shaft; and

a second rod connected to the second electrode array and slidably disposed in the shaft.

72. (New) The probe of claim 67, wherein either or both of the first and the second arrays of electrodes span a planar area in the range between 3 cm<sup>2</sup> to 20 cm<sup>2</sup> when deployed.

73. (New) The probe of claim 67, wherein the first and the second arrays of electrodes, when deployed, are spaced at least 2 cm from each other.

74. (New) The probe of claim 67, wherein the first and the second arrays of electrodes each has a concave face when deployed.

75. (New) The probe of claim 67, further comprising:

a first connector coupled to the shaft for connecting the first electrode array to one pole of a power supply; and

a second connector coupled to the shaft for connecting the second array to a second pole of the power supply.

76. (New) A probe for deploying electrode arrays, comprising:

a first tube having a distal end, a proximal end, and a lumen extending between the ends;

a first array of electrodes at least partially disposed within the lumen of the first tube, the first array of electrodes having a retracted configuration and a deployed configuration;

a second tube located next to the first tube, the second tube having a distal end, a proximal end, and a lumen extending between the ends; and

a second array of electrodes at least partially disposed within the lumen of the second tube, the second array of electrodes having a retracted configuration and a deployed configuration;

wherein at least one of the electrodes of the first array has an end that faces at least partially in a proximal direction, at least one of the electrodes of the second array has an end that faces at least partially in a distal direction, and the end of the at least one of the electrodes of the second array is located proximal to the end of the at least one of the electrodes of the first array when the first and the second arrays are deployed.

77. (New) The probe of claim 76, further comprising:

a first rod connected to the first electrode array and slidably disposed in the first tube; and  
a second rod connected to the second electrode array and slidably disposed in the second tube.

78. (New) The probe of claim 76, wherein either or both of the first and the second arrays of electrodes span a planar area in the range between 3 cm<sup>2</sup> to 20 cm<sup>2</sup> when deployed.

79. (New) The probe of claim 76, wherein the first and the second arrays of electrodes are spaced at least 2 cm from each other.

80. (New) The probe of claim 76, wherein the first and the second arrays of electrodes each has a concave face when deployed.

81. (New) The probe of claim 76, wherein the concave face of the first array faces the concave face of the second array when the arrays are deployed.

82. (New) The probe of claim 76, further comprising:

a first connector coupled to the first tube for connecting the first electrode array to one pole of a power supply; and

a second connector coupled to the second tube for connecting the second array to a second pole of the power supply.